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ABSTRACT

A study was done to determine if certain social variables outside of the school environment would show a relationship with substance abuse. Non-school activities considered were organized athletics, clubs, and music and drama organizations. A survey was distributed to 7,426 secondary school and middle school students in a large Midwestern suburban/rural county over 2 school years (1988-90). The instrument used included 52 items touching on participation in activities, family structure, and substance abuse. Analysis of the data indicated that substance abuse is more likely when the student does not participate in after-school activities. In addition, the data show that a less cohesive family unit is related to a higher probability of substance abuse as home environments where both parents are present showed the highest percentage of respondents who reported not using substances. Students from two-parent home environments were less likely to attend social functions where alcohol was present. Included in the text are 2 tables, and 2 appendixes offer 20 tables of additional data. (JB)

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THE EFFECT OF PARTICIPATION IN ACTIVITIES OUTSIDE THE SCHOOL AND FAMILY STRUCTURE ON SUBSTANCE USE BY MIDDLE AND SECONDARY SCHOOL STUDENTS

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The objective of this study was to determine if certain social variables outside of the school environment would show a relationship with substance use. Non-school activities considered were organized athletics, clubs, and music and drama organizations. This variable was categorized as follows: 1) participation in organized athletics; 2) participation in clubs; 3) participation in music or drama groups or organizations; 4) participation in more than one of the above activities; and 5) participation in no activities.

The family structure categorized the home environment into one of the following: 1) both parents present in the home; 2) parent and step-parent in the home; and 3) single parent, guardian, or other home situation.

The substances surveyed included tobacco, alcohol, marijuana, cocaine, narcotics, stimulants, depressants, hallucinogens and over-the-counter drugs.

The first assumption tested in this study was that students who participate in activities are less likely to become substance users. If the assumption is correct, substance use should be more frequent among students who are less social than those who are involved. Those students who are participating in activities after school hours are assumed to have less time to become involved in substance use. There may exist peer pressure in an organized activity against becoming involved in the use of substances.

The second assumption tested in this study was that students who have a more cohesive family unit are less likely to use substances. When both parents are present in the home, not only

are the activities of the children more closely monitored, but the cohesive family unit may give the adolescent a sense of belonging and he or she is less likely to use substances.

Therefore, the two hypotheses of this study, stated in null form are:

1. There is no difference in substance use between secondary and middle school students who participate in activities outside the school and secondary and middle school students who do not participate in activities outside the school.
2. There is no difference in substance use between middle and secondary school students who come from a family unit where both parents are present and a family unit where one parent and a step-parent are present, and a family unit where only a single parent or guardian is present.

The survey was distributed to 7426 students in a large Midwestern suburban/rural county over the academic years 1988-89 and 1989-90. All responses from the students were anonymous. The population of the county surveyed is considered to range from low to middle to high upper middle income brackets. The study does not include any inner-city subjects.

A 52 item instrument which had been revised from an earlier study by the authors was used to assess substance use. The responses to items concerning participation in activities and the responses to items concerning the family structure were cross-tabulated with the responses to items dealing with substance use. The Crosstabs procedure of SPSS-X release 3.1 for a VAX/VMS system

was employed. The chi-squared statistic was then applied to ascertain if there was a significant relation between the variables.

To determine participation in activities outside of the school environment, question 10 on the survey instrument was used. This item was stated as follows:

Outside of school I participate in:

A. organized athletics

B. clubs

C. music/drama

D. A and B

E. B and C

F. A and C

G. A, B and C

H. none

Responses of D, E, F, and G were recoded to "participate in more than one of the above activities in the analysis of the data.

To determine the home environment, item 8 on the questionnaire was stated as follows:

I live with:

A. parents (father and mother)

B. stepparent and parent (natural)

C. single parent (mother)

D. single parent (father)

E. guardian

F. other

Responses C, D, E, and F were recoded to one response "single

parent, guardian or other" for the analysis. There were not many responses to categories D, E and F. It also seemed reasonable to assume that there might be a difference among the home where both natural parents were present, where a natural parent and a step-parent were present, and a situation difference from above which was usually a family unit headed by a single mother.

To assess substance use, each of the substances tobacco (cigarettes, cigars, snuff, chewing tobacco), alcohol (beer, wine, wine coolers, hard liquor), marijuana (hashish, hash oil, grass, pot), cocaine (snow, nose candy, coke, crack), inhalants (glue, gasoline, aerosols, poppers, RUSH), narcotics (heroin, morphine, codeine, opium), hallucinogens (LSD, peyote, mescaline, PCP), and misuse of over-the-counter stimulants or prescription drugs (amphetamines, dexedrine, diet pills, speed, uppers), over-the-counter depressants or prescription drugs (barbituates, tranquilizers, downers, sleeping pills, reds), and common over-the-counter drugs (cold pills, diet pills, cough syrup, NoDoz, Compose) were listed with the following responses:

A. never used
B. have experimented with
C. did use but quit
D. now use less than once per month
E. now use 1-4 times per month
F. now use 1-4 times per week
G. now use 1 or more times per day (this response was omitted for misuse of over-the-counter drugs)

For analysis, it was decided to consider B and C as one

category, and to consider D, E, F, and G as one category. It seemed possible that students who did use a substance but quit could be viewed as experimenting with the substance. Responses to categories D, E, F, and G indicate the student does use the substance.

Later in the survey, the questions "Where do you most frequently use alcohol?" "Where do you most frequently use marijuana?", and "Where do you most frequently use other drugs?" were asked with the following responses:

A. I don't use

B. home

C. friend's home

D. school

E. public/recreation areas

Responses B through E were recoded as one category to further check the percentage of students who are using a particular substance.

As another check on alcohol use the following question was asked:

I have had three or more alcoholic drinks in a row in the last two weeks.

A. Yes

B. No

A check on the social aspects of alcohol was surveyed the following item:

Is alcohol present at the social parties you attend?

A. never
B. seldom

C. often

D. always

Responses C and D were recoded as one response.

Other items in the survey included "parents' knowledge of alcohol use," "parents' knowledge of tobacco use" and "parents' knowledge of marijuana use." These items had the following response categories:

A. I don't use

B. Parents know/approve

C. Parents know/disapprove

D. Parents don't know

E. Parents don't care

The percentages of students responding to "I don't use" were compared with the response to the item above to check on the consistency of the responses.

Another set of items "Source of obtaining tobacco", Source of obtaining alcohol" and "Source of obtaining marijuana" included the response category "I don't use". This response category for these items was one more check on the reported use for these substances.

The tables presented in Appendix A indicate that a relationship does exist between participation in non-school activities and substance use. Examination of the "None" response to involvement in non-school activities shows a lower percentage of students involved in activities report that they do not use a particular substance, while in almost every case a higher percentage of those not involved outside of school report use of the substance. With

tobacco, 48.3% of those not involved in activities reported that they never smoked while 65.3% of those involved in athletics responded that they never smoked. The chi-squared value is significant beyond 5 places.

From the data, the most frequently used substances were tobacco, alcohol and marijuana. A tabulation of those reporting non-usage of thses substances to the items of "where substance is used", "Parental knowledge of substance use" and "Source of substance" is presented in Table 1.

Table 1

Percent Reporting Non-Use of Substances in Different Activity Categories

	Athletics	Govt/Clubs	Music/Drama	More Than One	None
Tobacco					
Where Used	79.8	76.2	74.0	82.5	63.8
Parent Knowledge	79.4	76.7	73.1	82.8	62.6
Where Substance Obtained	78.9	76.1	73.1	80.7	62.9
Alcohol					
Where Used	66.1	62.4	60.8	64.7	51.7
Parent Knowledge	66.5	63.4	62.2	66.5	51.8
Where Substance Obtained	65.7	63.2	60.6	64.8	50.3

Marijuana

	Athletics	Govt/Clubs	Music/Drama	More Than One	None
Where Used	92.5	89.9	86.5	91.6	81.7
Parent Knowledge	92.1	89.5	85.7	90.9	80.8
Where Substance Obtained	93.0	91.0	87.0	91.7	82.2

While the tables presented in Appendix A show different percentages, it must be kept in mind that the responses to the items were different. "Never used" is different than "I don't use". However, the percentages reporting never to have used a substance were lower for those who are not involved in after-school activities.

Since alcohol is the most popular of the substances, the responses to the item "I have had three or more drinks in the last 2 weeks" is interesting because the same pattern is displayed. As can be seen in the appropriate table in Appendix A, the percentage responding "yes" to this item ranged 14.9% to 17.8% for those involved in after-school activities, but was 22.7% for those not involved in after-school activities.

The presence of alcohol at social functions is more prevalent among those who are not involved in after-school activities. The percentages who report that alcohol is never present at social functions ranges from 45.3% to 50.3% for those involved in after-school activities, but is only 41.8% for those not involved in activities. The range of those reporting that alcohol is often present at social functions is from 23.7% to 25.4%

for those involved in activities. For those not involved in activities 32% reported that alcohol is often present at social functions. Again, the chi-square statistic is significant.

The tables displayed in Appendix B indicating the relationship between family structure and substance use show a definite pattern. The use of any substance is less likely by the respondents if both parents are present. Substance use is more often reported for a parent/step-parent home environment than for a home environment where both parents are present. The remaining situation, a single parent or environment different from both parents or parent/step-parent is the most likely situation for substance use to occur.

Again, data were collected on items where substance is used, whether parents have knowledge of substance use and where substance is obtained. Table 2 presents the percent who indicate non-use of the substances of tobacco, alcohol and marijuana.

Table 2

Percent Reporting Non-Use of Substances in Different Home Environment Categories

Tobacco

	Parents	Parent/Step-Parent	Single Parent/Other
Where Used	77.8	68.9	62.8
Parent Knowledge	77.4	67.2	62.3
Where Substance Obtained	77.0	66.9	62.2

	Parents	Parent/Step-Parent	Single Parent/Other
Alcohol			
Where Used	63.5	53.6	52.0
Parent Knowledge	64.4	54.2	51.8
Where Substance Obtained	63.3	51.8	50.9
Marijuana			
Where Used	90.7	84.5	79.2
Parent Knowledge	89.9	82.6	78.4
Where Substance Obtained	91.0	84.8	80.4

It is evident that in home environments where both parents are present the highest percentage of respondents report that they do not use the substance. Again, the argument must be made that "I don't use" is different from "never used". As is demonstrated in the tables in Appendix B, the more the home environment deviates from a two-parent situation, the more likely the respondent is to report use of the substance.

Further examination of the use of alcohol, the most popular of the substances surveyed, from the appropriate table in Appendix B shows that 83.1% of the respondents coming from a family environment where both parents are present answered "no" to "I have had three or more drinks in the last two weeks" while only 75.0% of those from single parent environments answered "no". The difference in response was highly significant as demonstrated by the chi-squared value of 52.3 with two degrees of freedom.

Another table in Appendix B clearly indicates that students

from two-parent home environments are less likely to attend social functions where alcohol is present. 49.9% of those students whose home situation includes both parents reported that alcohol was never present at social functions while only 38.7% of the students from a single-parent home reported that alcohol is never present.

It is apparent from the data that not every student who is not involved in activities uses substances nor does every child from a single-parent home become a substance user. There are students who participate in activities that use drugs and there are two-parent home environments where the children use substances. However, substance abuse is more likely when the student does not participate in after-school activities. The home environment also shows a relation to substance abuse.

If this survey is representative of students in lower middle, middle and upper middle socio-economic status, it might be said that the students using the substances will less likely be involved in social activities. The students who do not participate in after-school activities are more likely to become involved in substance use. Furthermore, a less cohesive family unit is related to a higher probability of substance use.

APPENDIX A

Q13 USE OF TOBACCO by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q13	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DR AMA 2	> ONE 3	NONE 4	Row Total
NEVER	0	1539	395	374	972	1112	4392
		1417.7	380.3	370.7	838.8	1384.6	60.2%
		65.3%	62.5%	60.7%	69.7%	48.3%	
EXPERIMENTED/QUI	1	508	137	132	263	525	1565
		505.2	135.5	132.1	298.9	493.4	21.4%
		21.6%	21.7%	21.4%	18.9%	22.8%	
USE	2	309	100	110	159	664	1342
		433.2	116.2	113.3	256.3	423.1	18.4%
		13.1%	15.8%	17.9%	11.4%	28.9%	
	Column Total	2356	632	616	1394	2301	7299
		32.3%	8.7%	8.4%	19.1%	31.5%	100.0%

Chi-Square	Value	DF	Significan
Pearson	304.26636	8	.00000
Likelihood Ratio	296.45627	8	.00000
Mantel-Haenszel test for linear association	138.12271	1	.00000

Minimum Expected Frequency - 113.258

Number of Missing Observations: 127

Q14	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DRAMA 2	> ONE 3	NONE 4	Row Total
NEVER	0	1255	317	316	764	909	3561
		1145.2	305.0	300.1	674.6	1136.0	48.6%
		53.2%	50.5%	51.1%	55.0%	38.9%	
EXPERIMENTED/QUI	1	677	190	179	390	748	2184
		702.4	187.1	184.1	413.7	696.7	29.8%
		28.7%	30.3%	29.0%	28.1%	32.0%	
USE	2	426	121	123	235	682	1587
		510.4	135.9	133.8	300.6	506.3	21.6%
		18.1%	19.3%	19.9%	16.9%	29.2%	
	Column Total	2358	628	618	1389	2339	7332
		32.2%	8.6%	8.4%	18.9%	31.9%	100.0%

Chi-Square	Value	DF	Significance
Pearson	167.06368	8	.00000
Likelihood Ratio	165.60837	8	.00000
Mantel-Haenszel test for linear association	86.97654	1	.00000

Minimum Expected Frequency - 133.765

Number of Missing Observations: 94

Q15	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DR AMA 2	> ONE 3	NONE 4	Row Total
NEVER	0	2079	530	486	1223	1650	5968
		1917.9	513.4	500.4	1134.0	1902.4	81.2%
		88.1%	83.9%	78.9%	87.6%	70.5%	
EXPERIMENTED/QUI	1	208	80	79	108	449	924
		296.9	79.5	77.5	175.6	294.5	12.6%
		8.8%	12.7%	12.8%	7.7%	19.2%	
USE	2	74	22	51	65	243	455
		146.2	39.1	38.1	86.5	145.0	6.2%
		3.1%	3.5%	8.3%	4.7%	10.4%	
	Column Total	2361	632	616	1396	2342	7347
		32.1%	8.6%	8.4%	19.0%	31.9%	100.0%

Chi-Square	Value	DF	Significance
Pearson	307.63104	8	.00000
Likelihood Ratio	302.89340	8	.00000
Mantel-Haenszel test for linear association	184.08014	1	.00000

Minimum Expected Frequency - 38.149

Number of Missing Observations: 79

Q16 USE OF COCAINE by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q16	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DR AMA 2	> ONE 3	NONE 4	Row Total
0 NEVER		2310 2261.7 97.8%	609 604.2 96.5%	586 591.8 94.8%	1342 1335.8 96.2%	2188 2241.6 93.5%	7035 95.8%
1 EXPERIMENTED/QUI		37 73.3 1.6%	21 19.6 3.3%	27 19.2 4.4%	31 43.3 2.2%	112 72.6 4.8%	228 3.1%
2 USE		15 27.0 .6%	1 7.2 .2%	5 7.1 .8%	22 15.9 1.6%	41 26.8 1.8%	84 1.1%
Column Total		2362 32.1%	631 8.6%	618 8.4%	1395 19.0%	2341 31.9%	7347 100.0%

Chi-Square	Value	DF	Significanc
Pearson	69.67052	8	.00000
Likelihood Ratio	73.58487	8	.00000
Mantel-Haenszel test for linear association	46.49960	1	.00000

Minimum Expected Frequency - 7.066

Number of Missing Observations: 79

Q17 USE OF OTHER STIMULANTS by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q17	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DRAMA 2	> ONE 3	NONE 4	Row Total
0 NEVER		2182 2051.7 92.4%	564 549.8 89.1%	527 535.9 85.4%	1233 1213.4 88.3%	1880 2035.1 80.2%	6386 86.9%
1 QUIT USING		128 219.1 5.4%	51 58.7 8.1%	63 57.2 10.2%	112 129.6 8.0%	328 217.3 14.0%	682 9.3%
2 USE		52 91.2 2.2%	18 24.5 2.8%	27 23.8 4.4%	52 54.0 3.7%	135 90.5 5.8%	284 3.9%
Column Total		2362 32.1%	633 8.6%	617 8.4%	1397 19.0%	2343 31.9%	7352 100.0%

Chi-Square	Value	DF	Significanc
Pearson	160.08525	8	.00000
Likelihood Ratio	159.79504	8	.00000
Mantel-Haenszel test for linear association	119.87619	1	.00000

Minimum Expected Frequency - 23.834

Number of Missing Observations: 74

Q18 USE OF DEPRESSANTS by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q18	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DRAMA 2	> ONE 3	NONE 4	Row Total
NEVER	0	2283 2201.0 96.7%	593 589.9 93.7%	563 574.0 91.4%	1304 1301.8 93.3%	2106 2182.4 89.9%	6849 93.2%
QUIT USING	1	56 116.0 2.4%	28 31.1 4.4%	41 30.3 6.7%	61 68.6 4.4%	175 115.0 7.5%	361 4.9%
USE	2	23 45.0 1.0%	12 12.1 1.9%	12 11.7 1.9%	32 26.6 2.3%	61 44.6 2.6%	140 1.9%
	Column Total	2362 32.1%	633 8.6%	616 8.4%	1397 19.0%	2342 31.9%	7350 100.0%

Chi-Square	Value	DF	Significance
Pearson	91.10539	8	.00000
Likelihood Ratio	95.49341	8	.00000
Mantel-Haenszel test for linear association	65.37972	1	.00000

Minimum Expected Frequency - 11.733

Number of Missing Observations: 76

Q19 USE OF INHALANTS by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q19	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DR > AMA 2	ONE 3	NONE 4	Row Total
NEVER	0	2210 2148.9 93.6%	588 575.9 92.9%	562 562.2 90.9%	1288 1270.0 92.3%	2036 2127.0 87.1%	6684 91.0%
QUIT USING	1	119 167.5 5.0%	34 44.9 5.4%	44 43.8 7.1%	79 99.0 5.7%	245 165.8 10.5%	521 7.1%
USE	2	33 45.7 1.4%	11 12.2 1.7%	12 11.9 1.9%	29 27.0 2.1%	57 45.2 2.4%	142 1.9%
	Column Total	2362 32.1%	633 8.6%	618 8.4%	1396 19.0%	2338 31.8%	7347 100.0%

Chi-Square	Value	DF	Significance
Pearson	71.57462	8	.00000
Likelihood Ratio	68.99248	8	.00000
Mantel-Haenszel test for linear association	43.47688	1	.00000

Minimum Expected Frequency - 11.944

Number of Missing Observations: 79

Q20 USE OF NARCOTICS by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q20	Count / Exp Val / Col Pct	Q10 ATHLETICS 0	GOVT/CLUB 1	MUSIC DR > AMA 2	ONE 3	NONE 4	Row Total
NEVER	0	2291 2230.5 97.0%	600 595.6 95.1%	576 583.3 93.2%	1318 1315.8 94.5%	2151 2210.7 91.8%	6936 94.4%
QUIT USING	1	54 98.4 2.3%	26 26.3 4.1%	33 25.7 5.3%	47 58.1 3.4%	146 97.5 6.2%	306 4.2%
USE	2	18 34.1 .8%	5 9.1 .8%	9 8.9 1.5%	29 20.1 2.1%	45 33.8 1.9%	106 1.4%
	Column Total	2363 32.2%	631 8.6%	618 8.4%	1394 19.0%	2342 31.9%	7348 100.0%

Chi-Square	Value	DF	Significance
Pearson	68.75923	8	.00000
Likelihood Ratio	70.60361	8	.00000
Mantel-Haenszel test for linear association	49.06322	1	.00000

Minimum Expected Frequency - 8.915

Number of Missing Observations: 78

Q21 USE OF HALLUCINOGENS by Q10 INVOLVEMENT OUTSIDE OF SCHOOL

Q21	Count / Exp Val / Col Pct	Q10 ATHLETICS (0)	GOVT/CLUB (1)	MUSIC (2)	DR > ONE AMA (3)	NONE (4)	Row Total
NEVER	0	2312	610	568	1328	2101	6919
		2223.8	595.7	582.5	1310.0	2206.9	94.1%
		97.8%	96.4%	91.8%	95.4%	89.6%	
QUIT USING	1	33	17	32	41	167	290
		93.2	25.0	24.4	54.9	92.5	3.9%
		1.4%	2.7%	5.2%	2.9%	7.1%	
USE	2	18	6	19	23	77	143
		46.0	12.3	12.0	27.1	45.6	1.9%
		.8%	.9%	3.1%	1.7%	3.3%	
	Column Total	2363 32.1%	633 8.6%	619 8.4%	1392 18.9%	2345 31.9%	7352 100.0%

Chi-Square	Value	DF	Significance
Pearson	163.33265	8	.00000
Likelihood Ratio	166.75469	8	.00000
Mantel-Haenszel test for linear association	110.56502	1	.00000

Minimum Expected Frequency - 12.040

Number of Missing Observations: 74

Q10

Q22	Count / Exp Val / Col Pct	ATHLETICS 0	GOVT/CLUB 1	MUSIC DRAMA 2	> ONE 3	NONE 4	Row Total
NEVER	0	1227	293	279	670	1025	3494
		1120.2	300.5	294.3	665.0	1114.0	47.8%
		52.3%	46.6%	45.3%	48.1%	44.0%	
QUIT USING	1	798	223	236	483	890	2630
		843.2	226.2	221.5	500.5	838.6	36.0%
		34.0%	35.5%	38.3%	34.7%	38.2%	
USE	2	320	113	101	239	417	1190
		381.5	102.3	100.2	226.5	379.4	16.3%
		13.6%	18.0%	16.4%	17.2%	17.9%	
	Column Total	2345	629	616	1392	2332	7314
		32.1%	8.6%	8.4%	19.0%	31.9%	100.0%

Chi-Square	Value	DF	Significance
Pearson	40.95178	8	.00000
Likelihood Ratio	41.24079	8	.00000
Mantel-Haenszel test for linear association	30.00407	1	.00000

Minimum Expected Frequency - 100.224

Number of Missing Observations: 112

APPENDIX B

Q13 USE OF TOBACCO by Q8 ADULT RESPONSIBLE FOR HOME

Q13	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
0		3421	472	494	4387
NEVER		3174.0	574.0	639.0	60.2%
		64.9%	49.5%	46.5%	
1		1039	269	254	1562
EXPERIMENTED/QUI		1130.1	204.4	227.5	21.4%
		19.7%	28.2%	23.9%	
2		815	213	314	1342
USE		970.9	175.6	195.5	18.4%
		15.5%	22.3%	29.6%	
	Column Total	5275	954	1062	7291
		72.3%	13.1%	14.6%	100.0%

Chi-Square	Value	DF	Significar
Pearson	205.99738	4	.00000
Likelihood Ratio	197.41916	4	.00000
Mantel-Haenszel test for linear association	186.16265	1	.00000

Minimum Expected Frequency - 175.596

Number of Missing Observations: 135

Q14 USE OF ALCOHOL by Q8 ADULT RESPONSIBLE FOR HOME

Q14	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
NEVER	0	2796	369	393	3558
		2567.2	468.7	522.1	48.6%
		52.9%	38.2%	36.6%	
EXPERIMENTED/QUI	1	1461	346	375	2182
		1574.4	287.4	320.2	29.8%
		27.6%	35.9%	34.9%	
USE	2	1029	250	307	1586
		1144.4	208.9	232.7	21.6%
		19.5%	25.9%	28.6%	
	Column Total	5286 72.2%	965 13.2%	1075 14.7%	7326 100.0%

Chi-Square	Value	DF	Significanc
Pearson	146.40822	4	.00000
Likelihood Ratio	147.24629	4	.00000
Mantel-Haenszel test for linear association	120.78355	1	.00000

Minimum Expected Frequency - 208.912

Number of Missing Observations: 100

Q15	Count / Exp Val / Col Pct	PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
0 NEVER		4503 4296.2 85.1%	708 786.7 73.1%	747 875.1 69.3%	5958 81.2%
1 EXPERIMENTED/QUI		540 667.0 10.2%	176 122.1 18.2%	209 135.9 19.4%	925 12.6%
2 USE		249 328.8 4.7%	85 60.2 8.8%	122 67.0 11.3%	456 6.2%
	Column Total	5292 72.1%	969 13.2%	1078 14.7%	7339 100.0%

Chi-Square	Value	DF	Significance
Pearson	198.66429	4	.00000
Likelihood Ratio	184.67359	4	.00000
Mantel-Haenszel test for linear association	179.09018	1	.00000

Minimum Expected Frequency - 60.208

Number of Missing Observations: 87

Q16 USE OF COCAINE by Q8 ADULT RESPONSIBLE FOR HOME

Q16	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
0 NEVER		5136	903	987	7026
		5065.6	927.5	1032.8	95.7%
		97.1%	93.2%	91.5%	
1 EXPERIMENTED/QUI		120	52	57	229
		165.1	30.2	33.7	3.1%
		2.3%	5.4%	5.3%	
2 USE		36	14	35	85
		61.3	11.2	12.5	1.2%
		.7%	1.4%	3.2%	
	Column Total	5292	969	1079	7340
		72.1%	13.2%	14.7%	100.0%

Chi-Square	Value	DF	Significanc
Pearson	99.48747	4	.00000
Likelihood Ratio	83.54545	4	.00000
Mantel-Haenszel test for linear association	91.25871	1	.00000

Minimum Expected Frequency - 11.221

Number of Missing Observations: 86

Q17 USE OF OTHER STIMULANTS by Q8 ADULT RESPONSIBLE FOR HOME

Q17	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
0 NEVER		4723	802	855	6380
		4600.2	844.3	935.5	86.9%
		89.2%	82.5%	79.4%	
1 QUIT USING		412	121	147	680
		490.3	90.0	99.7	9.3%
		7.8%	12.4%	13.6%	
2 USE		161	49	75	285
		205.5	37.7	41.8	3.9%
		3.0%	5.0%	7.0%	
	Column Total	5296	972	1077	7345
		72.1%	13.2%	14.7%	100.0%

Chi-Square	Value	DF	Significance
Pearson	97.35043	4	.00000
Likelihood Ratio	89.75183	4	.00000
Mantel-Haenszel test for linear association	91.35271	1	.00000

Minimum Expected Frequency - 37.715

Number of Missing Observations: 81

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Count / Exp Val / Col Pct	PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
Q18				
0 NEVER	5017 4932.3 94.8%	879 905.9 90.4%	947 1004.7 87.8%	6843 93.2%
1 QUIT USING	207 259.5 3.9%	70 47.7 7.2%	83 52.9 7.7%	360 4.9%
2 USE	68 100.2 1.3%	23 18.4 2.4%	48 20.4 4.5%	139 1.9%
Column Total	5292 72.1%	972 13.2%	1078 14.7%	7342 100.0%

Chi-Square	Value	DF	Significanc
Pearson	92.63906	4	.00000
Likelihood Ratio	80.46228	4	.00000
Mantel-Haenszel test for linear association	88.25284	1	.00000

Minimum Expected Frequency - 18.402

Number of Missing Observations: 84

Q19 USE OF INHALANTS by Q8 ADULT RESPONSIBLE FOR HOME

Q19	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
0 NEVER		4915	841	924	6680
		4815.2	884.6	980.2	91.0%
		92.9%	86.5%	85.8%	
1 QUIT USING		310	104	105	519
		374.1	68.7	76.2	7.1%
		5.9%	10.7%	9.7%	
2 USE		66	27	48	141
		101.6	18.7	20.7	1.9%
		1.2%	2.8%	4.5%	
	Column Total	5291	972	1077	7340
		72.1%	13.2%	14.7%	100.0%

Chi-Square	Value	DF	Significance
Pearson	99.71442	4	.00000
Likelihood Ratio	88.28843	4	.00000
Mantel-Haenszel test for linear association	89.42526	1	.00000

Minimum Expected Frequency - 18.672

Number of Missing Observations: 86

Q20 USE OF NARCOTICS by Q8 ADULT RESPONSIBLE FOR HOME

Q20	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
0 NEVER		5060	900	969	6929
		4994.5	916.8	1017.8	94.4%
		95.7%	92.7%	89.9%	
1 QUIT USING		180	56	69	305
		219.8	40.4	44.8	4.2%
		3.4%	5.8%	6.4%	
2 USE		50	15	40	105
		75.7	13.9	15.4	1.4%
		.9%	1.5%	3.7%	
	Column Total	5290	971	1078	7339
		72.1%	13.2%	14.7%	100.0%

Chi-Square	Value	DF	Significanc
Pearson	77.83241	4	.00000
Likelihood Ratio	64.93672	4	.00000
Mantel-Haenszel test for linear association	73.02528	1	.00000

Minimum Expected Frequency - 13.892

Number of Missing Observations: 87

Q22 USE OF OVER COUNTER DRUGS by Q8 ADULT RESPONSIBLE FOR HOME

Q22	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
NEVER	0	2582	427	479	3488
		2508.3	463.6	516.1	47.7%
		49.1%	44.0%	44.3%	
QUIT USING	1	1845	373	408	2626
		1888.4	349.0	388.5	35.9%
		35.1%	38.4%	37.7%	
USE	2	827	171	194	1192
		857.2	158.4	176.4	16.3%
		15.7%	17.6%	17.9%	
	Column Total	5254 71.9%	971 13.3%	1081 14.8%	7306 100.0%

Chi-Square	Value	DF	Significance
Pearson	15.16201	4	.00438
Likelihood Ratio	15.17324	4	.00436
Mantel-Haenszel test for linear association	11.74493	1	.00061

Minimum Expected Frequency - 158.422

Number of Missing Observations: 120

Q21 USE OF HALLUCINOGENS by Q8 ADULT RESPONSIBLE FOR HOME

Q21	Count / Exp Val / Col Pct	Q8 PARENTS 0	PARENT & STEPPAR 1	SINGLE M OTHER AN 2	Row Total
NEVER	0	5065 4978.6 95.8%	890 916.8 91.4%	957 1016.6 88.6%	6912 94.1%
QUIT USING	1	158 206.7 3.0%	60 38.1 6.2%	69 42.2 6.4%	287 3.9%
USE	2	66 103.7 1.2%	24 19.1 2.5%	54 21.2 5.0%	144 2.0%
	Column Total	5289 72.0%	974 13.3%	1080 14.7%	7343 100.0%

Chi-Square	Value	DF	Significance
Pearson	112.73358	4	.00000
Likelihood Ratio	95.70364	4	.00000
Mantel-Haenszel test for linear association	106.42617	1	.00000

Minimum Expected Frequency - 19.101

Number of Missing Observations: 83